

1) (20 points)

Choose 2 of the following 4 papers that we read in class, and discuss in a couple of paragraphs (for each) the major points. You may not choose an article for which you led the discussion.

“The Ocean’s Invisible Forest” – fertilizing the ocean with iron

“Can We Bury Global Warming” – carbon sequestration

“When Methane Made Climate” – methanogens and Earth’s early atmosphere

“Environmental Effects of Increased CO₂” – some sceptics

2) (40 points)

Are you convinced that the climate is changing? Discuss the evidence.

If so, do you think the change is forced by human activity? Discuss the evidence.

3) (10 points)

Choose two posters other than your own, and in a couple of sentences (for each) give us the main point.

4) (15 points)

From the assigned paper, “A Changing Climate for Prediction”, here are two sentences.

“By contrast, climate prediction on time scales of a century are much less sensitive to initial conditions, because the signal of anthropogenic climate change is typically much larger at longer time scales and because most elements of the climate change system have a “memory” of past climate-forcing factors that is shorter than a few decades.”

“The net effect of all these uncertainties is that the fractional uncertainty is smallest when lead times are between 30 and 50 years. Fortunately, this is also the time scale over which most longer term policy and business planning is carried out.”

Discuss what these two related sentences mean, and put them into the context of the paper.

5) (40 points)

Choose 4 of the 5 graphs, and discuss for each what information is being conveyed and the main point(s) of the graph.